Attorney's Docket No.: 12069-003US1 / TJ503514-003

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : John D. Fraser, et al.
Serial No. : 09/869,136
Filed : July 20, 2001
Title : SUPERANTIGENS

Art Unit : 1645
Examiner : Nita M. Minnifield, Ph.D.

Commissioner for Patents
Washington, D.C. 20231

RESPONSE TO RESTRICTION REQUIREMENT

In response to the office action mailed September 4, 2002 ("Office Action"), applicants elect the invention of Group I (claims 1-5 and 14) drawn to superantigens and a method of subtyping Streptococci by detecting the superantigens. Further, Applicants elect the species of SMEZ-2 (SEQ ID NO:2). Claims readable on the elected species include claims 1, 2, 6, 7, 14-20, 24, 25, 29, and 30. The election is made with traverse for the reasons set forth below.

In the Office Action, the Examiner divided the claims into 9 groups:

Group I, claims 1-5 and 14, drawn to superantigens and a method of subtyping Streptococci by detecting the superantigens.

Group II, claims 6-13 and 25-28, drawn to polynucleotides.

Group III, claim 15, drawn to a method of subtyping Streptococci by detecting the polynucleotides.

Group IV, claims 16-18, drawn to constructs containing a superantigen and a cell-targeting molecule.

Group V, claim 19, drawn to a pharmaceutical composition containing a construct.

Group VI, claims 20-23, drawn to antibodies to superantigens.

Group VII, claim 24, drawn to a kit containing an antibody.

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

December 4, 2002
Date of Deposit

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Deborah R. Nast
Typed or Printed Name of Person Signing Certificate

Group VIII, claim 29, drawn to a kit containing a polynucleotide.

Group IX, claim 30, drawn to a method of diagnosing a disease.

The Examiner asserted that:

> "The inventions listed as Groups I-IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I lacks novelty under PCT Article 33(2) as being anticipated by Goshorn et al 1998 (Infection and Immunity, 1998, 56/9:2518-2820), which discloses a superantigen having the amino acid sequence of SPE-J, SEQ ID NO:8. Group I is the main invention in this application and it lacks novelty, therefore the other claims are not so linked by a special technical feature within the meaning of PCT Rule 13.2 so as to form a single inventive concept." See the Office Action, the paragraph bridging pages 2 and 3.

Applicants would like to point out that the Examiner erred in asserting that the amino acid sequence of SPE-J (SEQ ID NO:8) has been disclosed by Goshorn et al. ("Goshorn"). According to the International Preliminary Examination Report ("IPER," a copy of which is attached hereto as "Exhibit A"), the sequence disclosed by Goshorn (D9) only shares 56% identity with SEQ ID NO:8. See IPER, page 6, "Continuation of Box V," line 5 and "NOVELTY and INVENTIVE STEP," lines 2-3. Further, the Preliminary Examining Authority acknowledges novelty and inventive step for claims related to SPE-J (SEQ ID NO:8), as SPE-J significantly differs in functional properties, host specificities, and potential disease associations from that disclosed in Goshorn. See IPER, page 6, "NOVELTY and INVENTIVE STEP," lines 7-11. Thus, the Examiner's conclusion that the invention of Group I lacks novelty is erroneous. Since the Examiner based her restriction requirement on this erroneous conclusion, Applicants request that the Examiner reconsider her requirement.

Applicants also would like to point out that the restriction requirement appears to be inconsistent. For instance, claims 1-5 (drawn to superantigens) and 14 (drawn to a method of subtyping Streptococci by detecting the superantigens) are included in Group I; however, claims 6-13 (drawn to polynucleotides) and claim 15 (drawn to a method of subtyping Streptococci by detecting the polynucleotides) are separated into Group II and Group III, respectively. Applicants request that Group II and Group III be combined, as they are related as a product and a process of use, and the burden of search is no greater than that for Group I (including claims

drawn to both a product and a process of use). Further, claims in Groups I, IV and V, claims in Groups VI and VII, and claims in Groups II and VIII are directed to related products, respectively. Applicants request that (1) Groups IV and V be combined with Group I (among Groups IV and V, Group IV is preferred), (2) Group VI be combined with Group VII, and (3) Group VIII be combined with Group II, as the burden of search is no greater than that is for (1) Group I, (2) Group VI, and (3) Group II, respectively.

To sum up, Applicants have elected Group I and request that Groups IV and V be examined with Group I.

Enclosed is a Petition for a Two-Month Extension of Time, and a $400 check for the required fee. Please apply any charges to Deposit Account No. 06-1050, referencing Attorney Docket No. 12669-003US1.

Respectfully submitted,

Date: 12-4-02

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